

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A multi-stack optical data storage medium for recording and reading using a focused radiation beam having a wavelength of 655 nm entering through an entrance face of the medium during recording and reading, comprising:

5 a first substrate having, on a side thereof, a first recording stack L₀ comprising a recordable type L₀ recording layer comprising a dye, and formed in a first L₀ guide groove, and a first reflective layer present between the L₀ recording layer and the first substrate;

10 a second substrate having, on a side thereof, a second recording stack L₁ comprising a recordable type L₁ recording layer, said second recording stack being at a position closer to the entrance face than the L₀ recording stack and formed in a second L₁ guide groove; and

15 a transparent spacer layer sandwiched between the first and second recording stacks, said transparent spacer layer having a thickness substantially larger than the depth of focus of the focused radiation beam,

characterized in that the first L₀ guide groove has a depth G_{L0} ←
20 100 nm in the range 25 nm < G_{L0} < 40 nm, and the first reflective layer comprises a metal and has a thickness > 50 nm.

2. (Currently Amended) The multi-stack optical data storage medium as claimed in claim 1, wherein $\epsilon_{L0} \leftarrow 80$ nm and the first L_0 guide groove has a full half maximum width $W_{L0} < 350$ nm.

3. (Cancelled).

4. (Previously Presented) The multi-stack optical data storage medium as claimed in claim 1, wherein the recordable type L_0 recording layer has a thickness between 70 nm and 150 nm measured on the land portion of the guide groove.

5. (Previously Presented) The multi-stack optical data storage medium as claimed in claim 1, wherein said multi-stack optical data storage medium further comprises a dielectric layer present at a side of the L_0 recording layer opposite from the side where the first reflective layer is present.

6. (Previously Presented) The multi-stack optical data storage medium as claimed in claim 5, wherein the dielectric layer has a thickness in the range of 5 nm - 120 nm.

7. (Previously Presented) The multi-stack optical data storage medium as claimed in claim 1, wherein said multi-stack optical data storage medium further comprises a second reflective layer

comprising a metal present at a side of the L₀ recording layer
5 opposite from the side where the first reflective layer is present.

8. (Previously Presented) The multi-stack optical data storage medium as claimed in claim 7, wherein the second reflective layer has a thickness in the range of 5 nm -15 nm.

9. (Previously Presented) The multi-stack optical data storage medium as claimed in claim 7; wherein the second reflective layer mainly comprises a metal selected from the group of Ag, Au, Cu, Al.

10. (Previously Presented) The multi-stack optical data storage medium as claimed in claim 1, wherein the effective reflection level of the stacks is at least 0.18 at a radiation beam wavelength of approximately 655 nm.

11. (Cancelled).